

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

**[Docket No. 2002-NE-06-AD; Amendment 39-12750; AD 2002-10-04]
RIN 2120-AA64**

Airworthiness Directives; General Electric Company CF6-80E1A2 Turbofan Engines

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to General Electric Company (GE) CF6-80E1A2 turbofan engines. This action requires replacing a certain low pressure turbine rotor (LPTR) shaft at or before reaching a new reduced life cycle limit. This amendment is prompted by an updated low cycle fatigue (LCF) analysis of the LPTR shaft. The actions specified in this AD are intended to prevent LCF cracking and failure of the LPTR shaft due to exceeding the life limit, which could result in an uncontained engine failure and damage to the airplane.

DATES: Effective June 20, 2002.

Comments for inclusion in the Rules Docket must be received on or before July 15, 2002.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2002-NE-06-AD, 12 New England Executive Park, Burlington, MA 01803-5299. Comments may be inspected at this location, by appointment, between 8 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays. Comments may also be sent via the Internet using the following address: "9-ane-adcomment@faa.gov". Comments sent via the Internet must contain the docket number in the subject line.

This information may be examined, by appointment, at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

FOR FURTHER INFORMATION CONTACT: Karen Curtis, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Office Park, Burlington, MA 01803; telephone (781) 238-7192; fax (781) 238-7199.

SUPPLEMENTARY INFORMATION: GE has completed an updated low cycle fatigue (LCF) analysis for the CF6-80E1A2 LPTR shaft, part number (P/N) 1778M39P01, and has established a new reduced life cycle limit of 17,900 cycles-since-new (CSN) for this shaft. In January 2001, the FAA became aware of GE's in-process analysis and material testing of LPTR shaft, P/N 1778M39P01. The FAA approved temporary revisions (TR's) to Chapter 5, Life Limits, of the engine manual, to incorporate revised life limits for this shaft based on initial analytical results. The original life limit of 20,000 CSN for this part was last published in the engine manual revision dated February 15, 2001. TR 05-0019, dated March 7, 2001, revised this life limit from 20,000 CSN to 11,300 CSN. Subsequent issues of the engine manual, published August 15, 2001 and February 15, 2002, carried forward this revised lower life limit. The FAA chose to wait for the final analytical results and the updated material test data before taking action to mandate a lower life limit. This wait was made possible due to the young age of the affected parts. The high time shaft has accumulated less than 7,000 CSN at this time, which is well below the interim limit of 11,300 CSN and final approved life limit. The FAA now approves GE's final analytical results and the reduced life limit of 17,900 CSN. GE issued TR 05-0030 on February 28, 2002 to revise the life limits section of the engine manual for CF6-80E1A2 LPTR shaft, P/N 1778M39P01, to 17,900 CSN. Although interim publications of the engine manual showed lower life limits for this part, those limits were not mandated by an AD. Therefore, an AD is now required to mandate the approved 17,900 CSN life limit.

FAA's Determination of an Unsafe Condition and Required Actions

Although this affected engine model is not used on any airplanes that are registered in the United States, the possibility exists this engine model could be used on airplanes that are registered in the United States in the future. This AD is being issued to prevent LCF cracking and failure of the LPTR shaft due to exceeding the life limit, which could result in an uncontained engine failure and damage to the airplane. This AD requires replacing CF6-80E1A2 LPTR shafts, P/N 1778M39P01, at or before reaching the new reduced life cycle limit of 17,900 CSN.

Immediate Adoption of This AD

Since there are currently no domestic operators of this engine model, notice and opportunity for prior public comment are unnecessary. Therefore, a situation exists that allows the immediate adoption of this regulation.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption ADDRESSES. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2002-NE-06-AD." The postcard will be date stamped and returned to the commenter.

Regulatory Analysis

This final rule does not have federalism implications, as defined in Executive Order 13132, because it would not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. Accordingly, the FAA has not consulted with state authorities prior to publication of this final rule.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) if promulgated, will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

Sec. 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.airweb.faa.gov/rgl"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2002-10-04 General Electric Company: Amendment 39-12750. Docket No. 2002-NE-06-AD.

Applicability

This airworthiness directive (AD) is applicable to General Electric Company CF6-80E1A2 turbofan engines. These engines are installed on, but not limited to, Airbus Industrie A330 series airplanes.

Note 1: This AD applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance

Compliance with this AD is required as indicated, unless already done.

To prevent low cycle fatigue (LCF) cracking and failure of the low pressure turbine rotor (LPTR) shaft, due to exceeding the life limit, which could result in an uncontained engine failure and damage to the airplane, do the following:

(a) Replace LPTR shafts, part number (P/N) 1778M39P01, at or before the shaft accumulates 17,900 cycles-since-new (CSN).

(b) After the effective date of this AD, do not install any LPTR shaft, P/N 1778M39P01, that exceeds 17,900 CSN.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Engine Certification Office (ECO). Operators must submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, ECO.

Note 2: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the ECO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with Secs. 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be done.

Effective Date

(e) This amendment becomes effective on June 20, 2002.

Issued in Burlington, Massachusetts, on May 8, 2002.

Jay J. Pardee,

Manager, Engine and Propeller Directorate, Aircraft Certification Service.

[FR Doc. 02-12050 Filed 5-15-02; 8:45 am]

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